p1029: Box multiplication of linear binomials (v15)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine like terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(6x + 8)$ and $(3x + 7)$.

*	6x	8
3x	$18x^2$	24x
7	42x	56

ANSWER: $18x^2 + 66x + 56$

Question 2

Use the box method to multiply $(-2x - 7)$ and $(9x - 6)$.

*	$-2x$	-7
$9x$	$-18x^2$	$-63x$
-6	$12x$	42

ANSWER: $-18x^2 - 51x + 42$

Question 3

Use the box method to multiply $(-5x - 7)$ and $(-2x + 9)$.

*	$-5x$	-7
$-2x$	$10x^2$	$14x$
9	$-45x$	-63

ANSWER: $10x^2 - 31x - 63$